

UPDATED: 2/18/99

BEST MANAGEMENT PRACTICES FOR PLASTICS MANUFACTURERES

Best management practices can be thought of as using “good housekeeping” practices. Listed below are several procedures to operate your facility and minimize the risk of contamination to the environment.

1. Solvents, spent solvents (i.e. acetone, MEK, etc.), solvent mixtures, most plasticizers and vinyl chlorides used during plastic manufacturing are hazardous waste and must be properly disposed of by a permitted hazardous waste transporter, recycled by a permitted recycler, or distilled and recycled using a solvent recovery unit at your facility.
 - a. If the waste solvent is recycled by the facility generating the waste, the solvent stillbottoms must be collected and handled as hazardous waste, unless proven otherwise.
 - b. If the waste solvent is recycled by a permitted solvent recycler, receipts manifests must be obtained from the recycler and maintained at your facility.
 - c. The containers must be compatible with the hazardous waste stored in them and must meet DOT standards. Each container is to be marked with the date that the storage began and marked with the words “Hazardous Waste”.
2. Storage
 - a. For facilities storing large amounts of chemicals and/or fuels:
 1. All chemical and fuel storage must have secondary containment. This containment area should be able to hold 110% of the volume of the largest single tank to be stored in this area.
 2. Chemical storage areas must be on an impervious surface with secondary containment or a bermed and covered area away from drainage structures (e.g. Floor drains or storm drains).
3. In all situations where the waste is deemed to be hazardous, a permitted hazardous waste transporter must be used to transport the waste to a federally approved hazardous waste treatment or disposal facility. Hazardous waste manifest must be kept at your facility, available for review. The facility generating the hazardous waste is required to obtain an Environmental Protection Agency identification number by contacting:

Notification Coordinator
Bureau of Waste Planning and Regulation
Florida Dept. of Environmental Protection
Two Towers Office Building Room 471
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
(904) 488-4805

3. Contact cooling water must be sampled to determine proper disposal.
4. In large chemical storage areas, there must be aisle space between storage products. This will enable easy inspection of this container for leaks and/or corrosion.
5. All solvent containers must be empty before disposal. Empty small cans must be punctured before disposal to the local sanitary landfill. Drums must be taken by a recycler.
6. All facilities must operate without discharge of oil, solvents, wastewater or hazardous materials onto the ground, into soakage pits, storm drains or septic tanks. Discharges into sanitary sewers must meet sanitary sewer standards.
7. Rags used during cleaning processes which become contaminated with hazardous materials such as solvents, ink, etc. are considered hazardous wastes and may be handled by an approved rag service or an approved hazardous waste transporter. Used rags must not be disposed of in the trash/dumpster unless a hazardous waste profile indicates otherwise and approval is granted by this department.
8. All hazardous waste must be disposed of via a permitted hazardous waste transporter and taken to a federally approved hazardous waste disposal facility. Receipts of all waste disposals and hazardous waste manifests must be retained for no less than three (3) years, at the generator's facility and be available for review.
9. Special attention should be paid to storm drain locations (also known as storm sewers). Storm drains are designed to help alleviate rainwater build up. These drains are not connected to the sanitary sewer system, but rather assist in allowing the rainwater to drain into the ground and groundwater. Therefore, industrial discharges should not be allowed to drain into these grease and other contaminants so that rainwater does not wash these materials into the storm drain.

Pollution Prevention Suggestions

The reduction or elimination, at the source, of discharges or emissions to the environment.

1. Waste fluids should be segregated and kept separately. This prevents mixing incompatible substances and prevents contamination of a non-hazardous waste by a hazardous waste. This also allows them each to be recycled or disposed of appropriately and reduce disposal costs.
2. Recycling of waste fluids is a preferred option. This can either be done on-site or shipped to an approved recycler off-site. Units for filtering, adding the necessary additives and restoring coolant are available. (Installation of such units must be

- approved by DERM and the Fire Dept).
3. For small to medium facilities, it may be more economical to have a parts washer contractor replenish the parts cleaner and remove the spent solution, than to install a solvent recycling still.
 4. Large facilities, on-site solvent recycling stills are usually very economical with payback periods of only 2-3 years.
 5. Alternative cleaners are available (e.g. special water based cleaners_ that replace traditional solvent. These can be used in a variety of systems including dip tanks, power washers with jet sprays, or ultrasonic immersion tanks.
 6. Parts cleaning can be done in 3 stages:
 1. Preclean to remove heavier dirt (e.g. with a wire brush)
 2. Sink #1 as an initial sink to do heavier cleaning. Recycled only after full use.
 3. Sink #2 as a final sink for precision cleaning (used as make-up for sink#1).
 7. Parts can be removed slowly from solvent sinks and allowed to sit a few minutes on “dip racks” which drain back to the sink. Rollaway covers that are kept closed when not in use can be used on the sink. Sludges should be removed often and properly disposed, but the solution itself can be used many time.
 8. Stop leaks quickly. Drip pans can be placed to catch leaks. Spot mopping with a Bucket (and proper disposal of the water) can be performed. Floor cleaning machines Are available that will spray a cleaning solution, scrub with brushed, and vacuum up the solution (to be disposed of properly). Absorbent pads are available that allow the oil to be “squeezed out” into a waste oil drum. The pads can be reused several times.

Questions will be answered by the Industrial Facilities Section staff at (305) 372-6600. Any questions concerning pollution prevention please call the Pollution Prevention Program at (305) 372-6784.

